NOAA Teacher at Sea
Karolyn Braun
Onboard NOAA Ship KA'IMIMOANA
October 6 – 28, 2006

NOAA Teacher at Sea: **Karolyn Braun**
NOAA Ship KA'IMIMOANA
Mission: TAO Buoy Array Maintenance
Sunday, October 8, 2006

Science and Technology Log
Sunday is no day for rest on a ship. The day started out slow. I attended the science meeting where I learned where everyone was from and what projects I will be working on.

During an orientation, TAS Braun and part of the crew of the KA'IMIMOANA are lowered into the ocean in a RHIB.

The CTD casts will be conducted at each mooring site between 08-degreesN and 08-degrees S. The Monterey Bay Aquarium Research Institute (MBARI) is conducting Chlorophyll and nutrient sampling. They are using the water obtained in the canisters from the CTD. The Global Drifter Center at NOAA requests deployment of the Atlantic Oceanographic and Meteorological Laboratory (AOML) Surface Drifters on an ancillary basis. I am lucky enough to be participating in the Adopt-A-Drifter Program in which my students will be able to follow several buoys to plot which current they are in and where they are positioned. I will have an update on this when I deploy my first one. Very excited! In addition, The Pacific Marine Environmental Laboratory (PMEL) will be deploying Argo profiling CTD Floats. These conduct similar experiments to the CTD on board. However, these floats are individual canisters that send the information they collect to satellites. The ship has no further obligation to the CTD float.

I worked out for an hour and then we had a RHIB (Rigid Hull Inflatable Boat) orientation for when we go out and fix TAO buoys. This was followed by a CTD cast orientation to get ready for the first CTD that evening. It was a 1000m depth cast with various cylinders capturing water at various depths from 1000 to surface. Once the CTD was safely on deck and everything secure, I was able to collect water samples for chlorophyll testing. The water needed for chlorophyll testing was at depths of 200m, 150m, 100m,

80m, 60m, 40m, 20m, 10m and at the surface. I used small filters and a vacuum funnel to have the allotted amount of water flow over the filter. Once this was finished the filter was placed in a separate tube with 10ml of acetone for use at a later date. Stay tuned to find out more!